# Service discovery for IoT devices through PSync FullSync

Saurab Dulal, Ashlesh Gawande

### Summary

PSync <sup>1</sup> FullSync node needs to keep track of IBF and does operations on it – burden for nodes desiring to be a consumer only. This makes it harder to implement on IoT devices which may not have enough CPU power to do IBF operations. So we would like to create a FullSync consumer only node i.e FullConsumer using an IBF from the network and port it to the ESP8266 device.

#### Contribution

Develop a PSync FullConsumer and allow IoT devices to discover services via it.

#### Tasks

- ► Finalize the design for FullConsumer and update the existing code
- ► Write a simple SegmentFetcher for ESP8266
- Port FullConsumer to ESP8266
- Write a wrapper discovery library for PSync that allows users to publish/discover services

## Expected Outcome

ESP8266 device can discover prefixes advertised by other nodes in sync over broadcast face.

<sup>1</sup> https://named-data.net/wp-content/uploads/2016/06/ndn-0039-1-partial-sync.pdf